pyrenoid (reservoir of nutritive substance) may be indispensable to withstand desiccation or a drier atmosphere.

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FLOWERING OF YUCCA AUSTRALIS

By S. B. Parish

In 1878, the late Dr. C. C. Parry collected, in northern Mexico, seeds of a remarkable tree Yucca, which he had not been able to identify with any described species. On his next visit to California, in 1880, he gave some of these seeds to the writer. They germinated readily and the young plants were distributed to several friends in San Bernardino valley. They have grown well and have now attained a height of fifteen to twenty five feet, according to cultural conditions. Five years ago, the first of them flowered, producing, on a short, abruptly reflexed peduncle, a massive, compact panicle of pure white flowers, very much resembling in texture and shape the flowers of *Yucca mohavensis*, one of the common indigenous species of this region. It was readily recognized as that species of many synonyms, to which Trelease has given the name *Yucca australis* (Engelm.), perhaps the most distinct of the whole genus.

After flowering, this tree, which, like the others, was unbranched, divided into four short branches, and in the spring of the present year three of these produced each its panicle of flowers. It is shown by the illustration, which is reproduced from a photograph.

The tree is strikingly beautiful when in flower, far handsomer than it appears in the plate in Trelease's Yucceae, which is from a photograph taken in its native habitat in Mexico. Our trees have produced no fruit, doubtless by reason of the absence of the proper *Fronuba*. *Yucca australis* was introduced into the gardens of southern France about 1860, from seed collected by Roezl, the first tree flowering in its sixteenth year, and is there known under a variety of names. In the United States, the San Bernardino trees are probably the only flowering specimens, but it is well worth cultivation wherever the climate is suitable.

SAN BERNARDINO, CALIFORNIA.



Yucca australis in flower at San Bernardino, California.